

## **Department of Energy**

Carlsbad Field Office P. O. Box 3090 Carlsbad, New Mexico 88221

SEP 0 9 2004

Mr. Clint Marshall
Ground Water Quality Bureau
New Mexico Environment Department
P.O. Box 26110
Santa Fe, New Mexico 87502



Subject: Change in the Design for the Infiltration Controls Project and Map of the Paved and Unpaved Areas at the WIPP Site

Dear Mr. Marshall:

The purpose of this letter is to provide notification of changes relating to the substitution of the geotextile cushion under the high density polyethylene (HDPE) liner with a soil cushion for the salt pile infiltration controls and a map illustrating the paved and unpaved areas within the fenced area at the WIPP Site. You requested that this information be provided within 30 days of your August 11, 2004 visit to the WIPP site.

The April 24, 2003 Discharge Plan Modification Application for the infiltration controls project stated that:

- Mined salt would be used to shape the crown to a minimum two percent slope. In some
  cases native soil may be used for reshaping the salt pile crown and side slopes; and,
- A 16-ounce geotextile cushion would be emplaced at the salt contact with a 60-millimeter textured HDPE liner on the salt-pile. The drawings contained in the permit application specified a double-sided textured liner.

The double-sided textured liner provides better friction angles and improves slope stability on the 3:1 side slopes. Prior to installation it was determined that the double textured liner tends to snag the geotextile while positioning the liner during installation causing folds and displacement of the geotextile cushion. It was concluded that the use of salt or soil would provide an adequate base and equivalent cushion for the liner and improve the installation process for the textured liner. For this reason, the design was modified to require a liner base of soil or salt sized such that no material is larger than 0.5 inches in size and all material is free of trash and debris. One to two inches of screened soil was added to the salt surface, except where the salt could be prepared to meet the liner base specification.

This design change improves constructability of the overall liner system, provides adequate and equivalent protection of the liner, and is consistent with the base material used in the construction of the other infiltration controls (i.e., evaporation ponds and the Salt Storage Area).

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Finally, a map illustrating the paved and unpaved areas of the site that you requested during the August 11, 2004 visit to the WIPP site is enclosed, drawing number 24-028-W1, Revision W. If you have any questions or require additional information, please contact Mr. Daryl Mercer at (505) 234-7495.

Sincerely,

R. Paul Detwiler Acting Manager

**Enclosure** 

cc: w/o enclosure
J. Kieling, NMED
J. Bearzi, NMED
CBFO M&RC